

IN THE CLAIMS:

Please cancel without prejudice claims 1 – 10 and 12 - 21. New claims 22 – 25 have been added.

The listing of claims replaces all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1 to 10. (Canceled)

11. (Currently Amended) A DSL repeater for improving transmission of POTS band and DSL band signals over a local loop, the repeater comprising:

- an upstream signal amplifier for amplifying upstream DSL signals;
- a downstream signal amplifier for amplifying downstream DSL signals; and
- a load coil disposed in parallel with the upstream and downstream signal amplifiers for improving the transmission of POTS band signals over the local loop, wherein the load coil ~~having one or more capacitors electrically connected in parallel with an inter-winding capacitance between windings of the load coil.~~

comprises:

a first inductor including a first winding and a first core, the first winding having upstream and downstream ends and a first intra-winding capacitance;

a second inductor including a second winding and a second core, the second winding having upstream and downstream ends and having a second intra-winding capacitance;

a first compensating capacitor disposed between the upstream end of the first inductor and the downstream end of the second inductor to offset at least a portion of the first and second intra-winding capacitances for improving the impedance of the load coil to DSL-band signals; and

a second compensating capacitor disposed between the upstream end of the second inductor and the downstream end of the first inductor to offset at least a portion of the first and second intra-winding capacitances for improving the impedance of the load coil to DSL-band signals.

12 to 21 (Canceled).

22 (New). The DSL repeater of claim 11 wherein

the first and second compensating capacitors have respective first and second compensating capacitances;

the first and second capacitances approximate the first and second intra-winding capacitances respectively and

the first and second compensating capacitors act to counterbalance the first and second intra-winding capacitances respectively.

23 (New). The DSL repeater of claim 22 wherein

the ratio of the first compensating capacitance to the first intra-winding capacitance is in the range of 0.75 to 1.25.

24 (New). The DSL repeater of claim 23 wherein

the ratio of the first compensating capacitance to the first intra-winding capacitance is in the range of 0.99 to 1.01.

25 (New). The DSL repeater of claim 11 wherein:

the first and second compensating capacitors each have capacitances in the range 770pF to 1290pF.